

AMENDMENTS TO THE CLAIMS

1-26. (Canceled)

27. (New) A motion compensation method for generating a predictive image of a current macroblock included in a current picture with reference to a motion vector of an adjacent macroblock that is located adjacent to the current macroblock, the motion compensation method comprising:

specifying plural adjacent macroblocks which are located adjacent to the current macroblock and are already decoded;

deriving a motion vector of a current block included in the current macroblock using plural motion vectors of the specified plural adjacent macroblocks;

specifying a co-located macroblock which is co-located with the current macroblock and included in a picture different from the current picture including the current macroblock;

obtaining a motion vector of a corner block located in a corner of the co-located macroblock, when a co-located block is composed of a plurality of blocks for which motion compensation has been performed, the co-located block being co-located with the current block included in the current macroblock and being included in the co-located macroblock;

judging if a size of the obtained motion vector of the corner block is within a predetermined range;

generating a predictive image of the current block which is co-located with the co-located block, based on the result of the judging of whether the size of the obtained motion vector of the corner block is within the predetermined range,

wherein, in the generating of a predictive image of the current block, the generating is performed in such a manner that, if a size of the obtained motion vector is judged within the predetermined range, the predictive image of the current block is generated by setting the motion vector of the current block to be "0", and

the generating is performed in such a manner that, if a size of the obtained motion vector of the corner block is judged beyond the predetermined range, the predictive image of the

current block is generated by setting the motion vector of the current block to be the derived motion vector.

28. (New) The motion compensation method according to claim 27,
wherein a size of the current macroblock, the adjacent macroblock and the co-located macroblock is 16 pixels x 16 pixels,
a size of the current block and the co-located block is 8 pixels x 8 pixels, and
a size of each of the plurality of blocks which are included in the co-located macroblock and for which motion compensation has been performed is 4 pixels x 4 pixels.
29. (New) A motion compensation apparatus which generates a predictive image of a current macroblock included in a current picture with reference to a motion vector of an adjacent macroblock that is located adjacent to the current macroblock, the motion compensation apparatus comprising:
 - an adjacent macroblock specifying unit operable to specify plural adjacent macroblocks which are located adjacent to the current macroblock and are already decoded;
 - a motion vector deriving unit operable to derive a motion vector of a current block included in the current macroblock using plural motion vectors of the specified plural adjacent macroblocks;
 - a co-located macroblock specifying unit operable to specify a co-located macroblock which is co-located with the current macroblock and included in a picture different from the current picture including the current macroblock;
 - a motion vector obtaining unit operable to obtain a motion vector of a corner block located in a corner of the co-located macroblock, when a co-located block is composed of a plurality of blocks for which motion compensation has been performed, the co-located block being co-located with the current block included in the current macroblock and being included in the co-located macroblock;
 - a judging unit operable to judge if a size of the obtained motion vector of the corner block is within a predetermined range;

a generating unit operable to generate a predictive image of the current block which is co-located with the co-located block, based on a result of the judging performed by said judging unit,

wherein, if a size of the obtained motion vector is judged within the predetermined range by said judging unit, said generating unit is operable to generate the predictive image of the current block by setting the motion vector of the current block to be "0", and

if a size of the obtained motion is judged beyond the predetermined range by said judging unit, said generating unit is operable to generate the predictive image of the current block by setting the motion vector of the current block to be the derived motion vector.

30. (New) The motion compensation apparatus according to claim 29,

wherein a size of the current macroblock, the adjacent macroblock and the co-located macroblock is 16 pixels x 16 pixels,

a size of the current block and the co-located block is 8 pixels x 8 pixels, and
a size of each of the plurality of blocks which are included in the co-located macroblock and for which motion compensation has been performed is 4 pixels x 4 pixels.